Chemical Analysis Report

NE-DIST-2019-04-17-03

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **LSJR Downtown**
Request ID: **RQ-2019-04-08-18**
Customer: **NE-DIST**
Project ID: **SMP**

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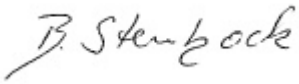
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 14-MAY-2019 19:06



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

A - Value reported is the mean of two or more determinations.
B - Results based on colony counts outside the acceptable range.
I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
J - Estimated value and/or the analysis did not meet established quality control criteria.
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
N - Presumptive evidence of presence of material.
O - Sampled, but analysis lost or not performed.
Q - Sample held beyond normal holding time.
T - Value reported is less than the criterion of detection.
U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
V - Analyte was detected in both sample and method blank.
X - Too few individuals to calculate SCI value.
Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: MCGIRTS CREEK AT OLD PLANK ROAD **Collection Date/Time: 04/16/2019 09:10**

Field ID: 20030346 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2078782	EPA 180.1 Rev. 2.0	Turbidity	5.6		NTU	P362374	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P362595	
		Sulfate	23		mg SO4/L	P362596	
	SM 2120 B	Color (true)	84		PCU	P362389	
	SM 2320 B-97	Total Alkalinity	28		mg CaCO3/L	P362947	
	SM 2540 C-97	TDS	116		mg/L	P363046	
	SM 2540 D-97	TSS	8	I	mg/L	P362915	
	SM 4500 F-C-97	Fluoride	0.083	I	mg F/L	P362951	
2078784	EPA 350.1 Rev. 2.0	Ammonia-N	0.081		mg N/L	P362725	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P362704	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.068		mg N/L	P362767	
	EPA 365.1 Rev. 2.0	Total-P	0.036		mg P/L	P362616	
	SM 5310 B-00	Organic Carbon	9.9		mg C/L	P362486	
2078786	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.012		mg P/L	P362368	
2078804	EPA 200.7 Rev. 4.4	Barium	23.7		ug/L	P362614	
		Calcium	15.9		mg/L	P362614	
		Iron	850		ug/L	P362614	
		Magnesium	1.70		mg/L	P362614	
		Potassium	1.1	I	mg/L	P362614	
		Sodium	10.5		mg/L	P362614	
		Zinc	5.0	U	ug/L	P362614	
	EPA 200.8 Rev. 5.4	Aluminum	394		ug/L	P362614	
		Antimony	0.064	I	ug/L	P362614	
		Arsenic	0.38		ug/L	P362614	
		Boron**	16.7		ug/L	P362614	
		Cadmium	0.020	U	ug/L	P362614	
		Chromium	0.50	I	ug/L	P362614	
		Copper	0.40	U	ug/L	P362614	
		Lead	3.41		ug/L	P362614	
		Nickel	0.55	I	ug/L	P362614	
		Selenium	0.20	U	ug/L	P362614	
		Silver	0.010	U	ug/L	P362614	
		Thallium	0.10	U	ug/L	P362614	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 05/11/2019.

Sample Location: Blockhouse at Broward Rd. **Collection Date/Time: 04/16/2019 11:35**

Field ID: G2NE1180 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2078779	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P362374	
	EPA 300.0 Rev. 2.1	Chloride	5.3E+03		mg Cl/L	P362595	
		Sulfate	760		mg SO4/L	P362596	
	SM 2120 B	Color (true)	75		PCU	P362389	
	SM 2320 B-97	Total Alkalinity	80		mg CaCO3/L	P362720	
	SM 2540 C-97	TDS	9.08E+03		mg/L	P363047	
	SM 2540 D-97	TSS	17		mg/L	P362917	
	SM 4500 F-C-97	Fluoride	0.40		mg F/L	P362722	
2078780	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P362715	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P362841	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.011		mg N/L	P362648	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P362605	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P362487	
2078781	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P362367	
2078800	EPA 8321B	2,4-D	0.0091		ug/L	P362252	
		Acesulfame K**	0.18	IJ	ug/L	P362469	SUR
		AMPA**	1.0	U	ug/L	P362469	
		Sucralose**	0.48		ug/L	P362469	
		Acetaminophen**	0.0080	U	ug/L	P362252	
		Endothall**	0.25	UJ	ug/L	P362469	SUR
		Glufosinate**	1.0	U	ug/L	P362469	
		Glyphosate**	1.0	U	ug/L	P362469	
		Bentazon	0.0047		ug/L	P362252	
		Carbamazepine**	0.0015	I	ug/L	P362252	
		Diuron	0.0091		ug/L	P362252	
		Fenuron	0.016	U	ug/L	P362252	
		Fluridone**	0.0050		ug/L	P362252	MS
		Imazapyr**	0.10		ug/L	P362252	
		Hydrocodone**	0.0020	U	ug/L	P362252	
		Ibuprofen**	0.020	U	ug/L	P362252	
		Imidacloprid	0.019		ug/L	P362252	MS
		Linuron	0.0040	U	ug/L	P362252	
		MCPP	0.0035	I	ug/L	P362252	
		Naproxen**	0.0080	U	ug/L	P362252	
		Primidone**	0.0040	U	ug/L	P362252	
		Pyraclostrobin**	0.0020	U	ug/L	P362252	
		Triclopyr**	0.0040	U	ug/L	P362252	
2078902		Aldicarb	0.020	U	ug/L	P362343	
		Aldicarb Sulfone	0.0020	U	ug/L	P362343	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P362343	
		Carbaryl	0.0020	U	ug/L	P362343	
		Carbofuran	0.0020	U	ug/L	P362343	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P362343	

Field ID: G2NE1180 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2078902	EPA 8321B	Methiocarb	0.0020	U	ug/L	P362343	
		Methomyl	0.0020	U	ug/L	P362343	
		Oxamyl	0.0020	U	ug/L	P362343	
		Propoxur	0.0020	U	ug/L	P362343	
2078904	EPA 8270D	Aldrin	4.3	U	ng/L	P362502	
		Alpha-BHC	2.2	U	ng/L	P362502	
		Alpha-Chlordane	1.1	U	ng/L	P362502	
		Beta-BHC	11	U	ng/L	P362502	
		Bifenthrin**	4.3	U	ng/L	P362502	
		Delta-BHC	11	U	ng/L	P362502	
		Gamma-BHC	11	U	ng/L	P362502	MS
		Carbophenothion	13	U	ng/L	P362502	
		Chlorothalonil	2.2	U	ng/L	P362502	
		Cis-Nonachlor**	1.1	U	ng/L	P362502	
		Cypermethrin	22	U	ng/L	P362502	
		DDD-p,p'	8.6	U	ng/L	P362502	MS
		DDE-p,p'	8.6	U	ng/L	P362502	
		DDT-p,p'	11	U	ng/L	P362502	
		Dicofol	32	U	ng/L	P362502	
		Dieldrin	4.3	U	ng/L	P362502	
		Endosulfan I	4.3	U	ng/L	P362502	
		Endosulfan II	4.3	U	ng/L	P362502	MS
		Endosulfan Sulfate	2.2	U	ng/L	P362502	
		Endrin	2.2	U	ng/L	P362502	
		Endrin Aldehyde	2.2	U	ng/L	P362502	
		Endrin Ketone	2.2	U	ng/L	P362502	MS
		Ethalfluralin**	3.2	U	ng/L	P362502	
		Gamma-Chlordane	1.1	U	ng/L	P362502	
		Heptachlor	1.6	U	ng/L	P362502	
		Heptachlor Epoxide	2.2	U	ng/L	P362502	
		Hexachlorobenzene**	2.2	U	ng/L	P362502	
		Methoxychlor	4.3	U	ng/L	P362502	
		Mirex	2.2	U	ng/L	P362502	
		Permethrin	11	U	ng/L	P362502	
		Trans-Nonachlor**	1.1	U	ng/L	P362502	
		Trifluralin	2.7	U	ng/L	P362502	
	EPA 8276	Chlordane	5.4	U	ng/L	P362502	
		Toxaphene	32	U	ng/L	P362502	
2078905	EPA 8270D	Acetochlor	0.25	U	ng/L	P362397	
		Alachlor	0.25	U	ng/L	P362397	
		Ametryn	1.3	IJ	ng/L	P362397	RPD
		Atrazine	35		ng/L	P362397	
		Atrazine Desethyl	4.1	I	ng/L	P362397	
		Azinphos Methyl	5.0	U	ng/L	P362397	
		Bromacil	13	J	ng/L	P362397	RPD

Field ID: G2NE1180 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2078905	EPA 8270D	Butylate	0.40	U	ng/L	P362397	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P362397	
		Chlorpyrifos Methyl	0.10	U	ng/L	P362397	
		Cyanazine	3.2	U	ng/L	P362397	
		Demeton	7.0	U	ng/L	P362397	
		Diazinon	0.12	U	ng/L	P362397	
		Dimethenamid**	0.10	U	ng/L	P362397	
		Disulfoton	0.50	U	ng/L	P362397	
		Dithiopyr**	0.12	I	ng/L	P362397	
		EPTC	1.2	U	ng/L	P362397	
		Ethion	0.15	U	ng/L	P362397	
		Ethoprop	0.63		ng/L	P362397	
		Fenamiphos	0.50	UJ	ng/L	P362397	LCS, RPD
		Fipronil	0.28	I	ng/L	P362397	
		Fipronil Desulfinyl**	0.42	I	ng/L	P362397	
		Fipronil Sulfide	0.39	I	ng/L	P362397	
		Fipronil Sulfone	0.75		ng/L	P362397	
		Fonofos	0.20	U	ng/L	P362397	
		Hexazinone	2.3	J	ng/L	P362397	LCS, MS, RPD
		Malathion	0.35	U	ng/L	P362397	
		Metalaxyl	0.67	IJ	ng/L	P362397	LCS, RPD
		Metolachlor	7.5		ng/L	P362397	
		Metribuzin	71	J	ng/L	P362397	CCV
		Mevinphos	0.50	UJ	ng/L	P362397	LCS, RPD
		Molinate	0.30	U	ng/L	P362397	
		Norflurazon	0.50	U	ng/L	P362397	
		Oxadiazon**	0.50		ng/L	P362397	
		Parathion Ethyl	0.25	U	ng/L	P362397	
		Parathion Methyl	0.55	U	ng/L	P362397	
		Pendimethalin	1.0	U	ng/L	P362397	
		Phorate	0.25	U	ng/L	P362397	
		Prodiamine**	0.17	U	ng/L	P362397	
		Prometon	0.90	UJ	ng/L	P362397	LCS
		Prometryn	0.20	UJ	ng/L	P362397	LCS, RPD
		Simazine	7.8		ng/L	P362397	
		Tebuconazole**	2.5	J	ng/L	P362397	LCS, RPD
		Terbufos	0.10	U	ng/L	P362397	
		Terbuthylazine	0.42	U	ng/L	P362397	
2078924	EPA 200.7 Rev. 4.4	Iron	480		ug/L	P362362	
		Manganese	38		ug/L	P362362	
		Zinc	15	U	ug/L	P362362	
	EPA 200.8 Rev. 5.4	Aluminum	252		ug/L	P362362	
		Antimony	0.20	U	ug/L	P362362	
		Arsenic	1.74		ug/L	P362362	

Field ID: G2NE1180 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2078924	EPA 200.8 Rev. 5.4	Cadmium	0.080	U	ug/L	P362362	
		Chromium	4.0	U	ug/L	P362362	
		Copper	1.8	I	ug/L	P362362	
		Lead	1.2	I	ug/L	P362362	
		Nickel	2.0	U	ug/L	P362362	
		Selenium	0.80	U	ug/L	P362362	
		Silver	0.040	U	ug/L	P362362	
		Thallium	0.40	U	ug/L	P362362	

Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Refer to the narrative for an explanation of QC Codes. Surrogate spike recovery exceeding the control limits. Results confirmed in sample duplicate. MDL for some parameters elevated due to matrix interference.
EPA 8270D: MS accuracies for atrazine, simazine, metribuzin, and bromacil not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Blockhouse 100m abv Irma rd. **Collection Date/Time: 04/16/2019 11:05**

Field ID: G2NE1159 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2078776	EPA 180.1 Rev. 2.0	Turbidity	24		NTU	P362374	
	EPA 300.0	Bromide	0.12		mg Br/L	P362586	
	SM 2320 B-97	Total Alkalinity	67		mg CaCO3/L	P362947	
	SM 2540 D-97	TSS	22		mg/L	P362916	
	SM 4500 F-C-97	Fluoride	0.12		mg F/L	P362951	
2078777	EPA 350.1 Rev. 2.0	Ammonia-N	0.16		mg N/L	P362725	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.61		mg N/L	P362704	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P362766	
	EPA 365.1 Rev. 2.0	Total-P	0.15		mg P/L	P362616	
	SM 5310 B-00	Organic Carbon	9.0		mg C/L	P362486	
2078778	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.054		mg P/L	P362368	

Ref. Method and Comment:
EPA 300.0: Bromide: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: TROUT RIVER AT GARDEN ST **Collection Date/Time: 04/16/2019 10:00**

Field ID: 20030751 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2078783	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P362374	
	EPA 300.0 Rev. 2.1	Chloride	18	A	mg Cl/L	P362821	
		Sulfate	12	A	mg SO4/L	P362824	
	SM 2120 B	Color (true)	120		PCU	P362389	
	SM 2320 B-97	Total Alkalinity	17		mg CaCO3/L	P363067	
	SM 2540 C-97	TDS	91		mg/L	P363046	
	SM 2540 D-97	TSS	3	I	mg/L	P362915	
	SM 4500 F-C-97	Fluoride	0.041	I	mg F/L	P362951	
2078785	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P362725	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P362704	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P362767	
	EPA 365.1 Rev. 2.0	Total-P	0.069		mg P/L	P362616	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P362486	
2078787	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.042		mg P/L	P362368	
2078805	EPA 200.7 Rev. 4.4	Barium	30.1		ug/L	P362614	
		Calcium	9.47		mg/L	P362614	
		Iron	680		ug/L	P362614	
		Magnesium	2.76		mg/L	P362614	
		Potassium	2.2		mg/L	P362614	
		Sodium	11.6		mg/L	P362614	
		Zinc	5.0	U	ug/L	P362614	
	EPA 200.8 Rev. 5.4	Aluminum	250		ug/L	P362614	
		Antimony	0.050	U	ug/L	P362614	
		Arsenic	0.43		ug/L	P362614	
		Boron**	28.0		ug/L	P362614	
		Cadmium	0.020	U	ug/L	P362614	
		Chromium	0.40	U	ug/L	P362614	
		Copper	0.40	U	ug/L	P362614	
		Lead	0.39	I	ug/L	P362614	
		Nickel	0.50	U	ug/L	P362614	
		Selenium	0.20	U	ug/L	P362614	
		Silver	0.010	U	ug/L	P362614	
		Thallium	0.10	U	ug/L	P362614	

Ref. Method and Comment:
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: LONG BR AT EVERGREEN AVE. **Collection Date/Time: 04/16/2019 13:00**

Field ID: G2NE0735 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2078788	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P362374	
	EPA 300.0	Bromide	0.096		mg Br/L	P362586	
	SM 2320 B-97	Total Alkalinity	119		mg CaCO3/L	P362947	
	SM 2540 D-97	TSS	4	I	mg/L	P362916	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P362951	
2078789	EPA 350.1 Rev. 2.0	Ammonia-N	0.068		mg N/L	P362725	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.28		mg N/L	P362704	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.15		mg N/L	P362767	
	EPA 365.1 Rev. 2.0	Total-P	0.078		mg P/L	P362617	
	SM 5310 B-00	Organic Carbon	5.4		mg C/L	P362486	
2078790	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.021		mg P/L	P362368	

Ref. Method and Comment:
EPA 300.0: Bromide: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P362374

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P362362

Component	Result	Code	Units
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P362614

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362362

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362614

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362614

Component	Result	Code	Units
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0
Batch ID: P362586

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362595

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362596

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362821

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362824

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P362715

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P362725

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P362704

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P362841

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362648

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362766

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362767

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362605

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362616

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362617

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P362367

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P362368

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270D
Batch ID: P362397

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8270D
Batch ID: P362502

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270D
Batch ID: P362502

Component	Result	Code	Units
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	12	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	8.0	U	ng/L
DDE-p,p'	8.0	U	ng/L
DDT-p,p'	10	U	ng/L
Delta-BHC	10	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfluralin	3.0	U	ng/L
Gamma-BHC	10	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P362502

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P362252

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P362252

Component	Result	Code	Units
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P362343

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P362469

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P362389

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P362720

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2320 B-97
Batch ID: P362947

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P363067

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-97
Batch ID: P363046

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P363047

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P362915

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P362916

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P362917

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P362722

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P362951

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P362486

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P362487

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P362362

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	106		P	85 - 115
Manganese	102		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P362614

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	96.1		P	85 - 115
Calcium	106		P	85 - 115
Iron	103		P	85 - 115
Magnesium	110		P	85 - 115
Potassium	103		P	85 - 115
Sodium	105		P	85 - 115
Zinc	97.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362362

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	96.4		P	85 - 115
Antimony	99.0		P	85 - 115
Arsenic	102		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	92.3		P	85 - 115
Copper	98.9		P	85 - 115
Lead	92.5		P	85 - 115
Nickel	100		P	85 - 115
Selenium	100		P	85 - 115
Silver	96.8		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362614

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	93.1		P	85 - 115
Antimony	91.8		P	85 - 115
Arsenic	95.2		P	85 - 115
Boron	94.6		P	85 - 115
Cadmium	95.9		P	85 - 115
Chromium	87.7		P	85 - 115
Copper	93.1		P	85 - 115
Lead	96.5		P	85 - 115
Nickel	93.3		P	85 - 115
Selenium	94.2		P	85 - 115
Silver	113		P	85 - 115
Thallium	90.8		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0
Batch ID: P362586

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bromide	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362595

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362596

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362821

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362824

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P362715

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	107		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P362725

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	102		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P362704

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	104		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P362841

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	102		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	100		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362766

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362767

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	98.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362605

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362616

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	103		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362617

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P362367

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P362368

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	101		P	90 - 110

Reference Method: EPA 8270D
Batch ID: P362397

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	104	101	P/P	71 - 121
Alachlor	102	99.7	P/P	72 - 119
Ametryn	47.4	75.9	P/P	47 - 144
Atrazine	96.6	97.2	P/P	75 - 123

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P362397

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	52.1	49.3	P/P	45 - 133
Azinphos Methyl	101	96.4	P/P	66 - 165
Bromacil	62.2	43.8	P/P	43 - 123
Butylate	58.1	58.5	P/P	27 - 83.0
Chlorpyrifos Ethyl	98.7	97.0	P/P	70 - 117
Chlorpyrifos Methyl	90.9	84.9	P/P	71 - 120
Cyanazine	72.2	70.5	P/P	34 - 264
Demeton	61.0	65.0	P/P	41 - 122
Diazinon	98.2	94.8	P/P	70 - 127
Dimethenamid	103	99.2	P/P	66 - 123
Disulfoton	84.5	81.5	P/P	56 - 127
Dithiopyr	107	104	P/P	67 - 125
EPTC	61.0	58.3	P/P	24 - 84.0
Ethion	103	104	P/P	53 - 132
Ethoprop	88.1	84.3	P/P	57 - 117
Fenamiphos	32.9	15.2	F/F	55 - 136
Fipronil	103	91.4	P/P	64 - 126
Fipronil Desulfinyl	101	94.3	P/P	47 - 114
Fipronil Sulfide	102	96.2	P/P	57 - 120
Fipronil Sulfone	97.7	86.9	P/P	52 - 115
Fonofos	82.4	82.7	P/P	61 - 121
Hexazinone	48.4	16.9	F/F	62 - 131
Malathion	101	97.5	P/P	67 - 126
Metalaxyl	13.7	9.41	F/F	54 - 128
Metolachlor	104	100	P/P	71 - 118
Metribuzin	73.1	72.4	P/P	42 - 221
Mevinphos	51.2	26.7	P/F	45 - 114
Molinate	67.5	70.4	P/P	33 - 91.0
Norflurazon	92.6	81.4	P/P	60 - 123
Oxadiazon	110	109	P/P	66 - 121
Parathion Ethyl	90.2	89.3	P/P	73 - 111
Parathion Methyl	91.2	89.4	P/P	74 - 126
Pendimethalin	103	109	P/P	63 - 131
Phorate	73.7	72.0	P/P	54 - 115
Prodiamine	115	114	P/P	38 - 140
Prometon	22.6	27.6	F/F	61 - 120
Prometryn	59.8	88.9	F/P	62 - 126
Simazine	101	92.6	P/P	75 - 126
Tebuconazole	56.4	14.6	P/F	21 - 115
Terbufos	85.6	83.3	P/P	65 - 116
Terbuthylazine	100	97.6	P/P	73 - 117

Reference Method: EPA 8270D
Batch ID: P362502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	56.3	47.3	P/P	20 - 93.0
Alpha-BHC	105	91.5	P/P	57 - 119
Alpha-Chlordane	78.7	82.3	P/P	58 - 112
Beta-BHC	116	114	P/P	56 - 149
Bifenthrin	92.4	101	P/P	50 - 130
Carbophenothion	72.5	77.4	P/P	26 - 147

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P362502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorothalonil	154	120	P/P	20 - 155
Cis-Nonachlor	72.8	83.2	P/P	50 - 130
Cypermethrin	91.6	105	P/P	40 - 137
DDD-p,p'	89.9	97.6	P/P	65 - 129
DDE-p,p'	108	112	P/P	57 - 116
DDT-p,p'	91.9	97.0	P/P	53 - 133
Delta-BHC	122	122	P/P	59 - 163
Dicofol	96.8	94.9	P/P	24 - 138
Dieldrin	81.7	88.1	P/P	60 - 120
Endosulfan I	81.7	85.0	P/P	64 - 118
Endosulfan II	93.7	87.1	P/P	58 - 142
Endosulfan Sulfate	111	113	P/P	60 - 127
Endrin	86.0	89.3	P/P	59 - 122
Endrin Aldehyde	106	121	P/P	49 - 132
Endrin Ketone	109	110	P/P	64 - 121
Ethalfluralin	92.5	86.3	P/P	50 - 130
Gamma-BHC	118	110	P/P	56 - 141
Gamma-Chlordane	106	109	P/P	56 - 110
Heptachlor	80.8	73.0	P/P	46 - 96.0
Heptachlor Epoxide	109	110	P/P	61 - 112
Hexachlorobenzene	70.8	54.8	P/P	50 - 130
Methoxychlor	116	122	P/P	63 - 134
Mirex	62.9	67.2	P/P	45 - 100
Permethrin	77.4	84.9	P/P	53 - 115
Trans-Nonachlor	106	106	P/P	50 - 130
Trifluralin	87.9	85.1	P/P	39 - 142

Reference Method: EPA 8276
Batch ID: P362502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.8	72.4	P/P	43 - 128
Toxaphene	83.2	76.7	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P362252

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	66.6		P	40 - 150
Acetaminophen	88.0		P	30 - 150
Bentazon	99.8		P	30 - 150
Carbamazepine	81.6		P	40 - 150
Diuron	79.2		P	40 - 150
Fenuron	103		P	40 - 150
Fluridone	110		P	40 - 150
Hydrocodone	74.3		P	40 - 150
Ibuprofen	79.5		P	40 - 150
Imazapyr	78.4		P	40 - 150
Imidacloprid	89.3		P	40 - 150
Linuron	79.3		P	40 - 150
MCPP	80.4		P	40 - 150
Naproxen	52.3		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P362252

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Primidone	81.1		P	40 - 150
Pyraclostrobin	90.5		P	40 - 150
Triclopyr	56.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P362343

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	78.6		P	40 - 150
Aldicarb	76.9		P	30 - 150
Aldicarb Sulfone	96.8		P	40 - 150
Aldicarb Sulfoxide	103		P	40 - 150
Carbaryl	77.9		P	40 - 150
Carbofuran	76.8		P	40 - 150
Methiocarb	70.2		P	40 - 150
Methomyl	93.2		P	40 - 150
Oxamyl	75.6		P	40 - 150
Propoxur	77.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P362469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	106		P	40 - 150
AMPA	116		P	40 - 150
Endothall	114		P	40 - 150
Glufosinate	119		P	40 - 150
Glyphosate	118		P	40 - 140
Sucralose	107		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P362389

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	104		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P362720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	98 - 106

Reference Method: SM 2320 B-97
Batch ID: P362947

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Reference Method: SM 2320 B-97
Batch ID: P363067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P363067

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P362722

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.2		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P362951

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P362486

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.5		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P362487

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.8		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P362362

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2077433	Iron	100	101	P/P	70 - 130
2077433	Manganese	97.9	97.6	P/P	70 - 130
2077433	Zinc	101	100	P/P	70 - 130

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P362614

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078912	Barium	95.3		P	80 - 120
2078912	Calcium	98.6		P	80 - 120
2078912	Iron	105		P	80 - 120
2078912	Magnesium	100		P	80 - 120
2078912	Potassium	101		P	80 - 120
2078912	Sodium	99.0		P	80 - 120
2078912	Zinc	97.1		P	80 - 120
2079154	Barium	96.7	97.5	P/P	80 - 120
2079154	Calcium	107	105	P/P	80 - 120
2079154	Iron	106	105	P/P	80 - 120
2079154	Magnesium	112	110	P/P	80 - 120
2079154	Potassium	108	108	P/P	80 - 120
2079154	Sodium	102	102	P/P	80 - 120
2079154	Zinc	98.1	99.4	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362362

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2077433	Aluminum	97.0	95.4	P/P	70 - 130
2077433	Antimony	101	97.6	P/P	70 - 130
2077433	Arsenic	109	105	P/P	70 - 130
2077433	Cadmium	97.6	92.9	P/P	70 - 130
2077433	Chromium	89.3	87.7	P/P	70 - 130
2077433	Copper	95.3	93.5	P/P	70 - 130
2077433	Lead	96.6	93.5	P/P	70 - 130
2077433	Nickel	99.4	96.4	P/P	70 - 130
2077433	Selenium	99.3	99.0	P/P	70 - 130
2077433	Silver	89.7	89.5	P/P	70 - 130
2077433	Thallium	106	103	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362614

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078912	Aluminum	90.8		P	80 - 120
2078912	Antimony	91.8		P	80 - 120
2078912	Arsenic	94.4		P	80 - 120
2078912	Boron	95.9		P	80 - 120
2078912	Cadmium	95.1		P	80 - 120
2078912	Chromium	87.5		P	80 - 120
2078912	Copper	89.4		P	80 - 120
2078912	Lead	96.4		P	80 - 120
2078912	Nickel	90.6		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362614

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078912	Selenium	92.2		P	80 - 120
2078912	Silver	112		P	80 - 120
2078912	Thallium	112		P	80 - 120
2079154	Aluminum	91.0	89.6	P/P	80 - 120
2079154	Antimony	90.2	89.8	P/P	80 - 120
2079154	Arsenic	92.6	92.6	P/P	80 - 120
2079154	Boron	95.7	94.3	P/P	80 - 120
2079154	Cadmium	94.0	92.7	P/P	80 - 120
2079154	Chromium	89.2	88.4	P/P	80 - 120
2079154	Copper	93.2	93.2	P/P	80 - 120
2079154	Lead	96.8	96.4	P/P	80 - 120
2079154	Nickel	93.1	93.1	P/P	80 - 120
2079154	Selenium	91.2	91.5	P/P	80 - 120
2079154	Silver	110	112	P/P	80 - 120
2079154	Thallium	109	111	P/P	80 - 120

Reference Method: EPA 300.0
Batch ID: P362586

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2076447	Bromide	102	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078628	Chloride	100		P	90 - 110
2078704	Chloride	99.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362596

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078628	Sulfate	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362821

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078783	Chloride	96.5		P	90 - 110
2078980	Chloride	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362824

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078783	Sulfate	96.5		P	90 - 110
2078980	Sulfate	97.9		P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P362715

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078380	Ammonia-N	107	107	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P362725

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078899	Ammonia-N	99.8	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P362841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2079178	Kjeldahl Nitrogen	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078626	NO2NO3-N	98.7	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362766

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078693	NO2NO3-N	97.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362767

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078784	NO2NO3-N	100	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362605

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078600	Total-P	90.9	93.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362616

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078718	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362617

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078900	Total-P	98.4	96.7	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P362367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078781	O-Phosphate-P	97.6	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P362368

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078747	O-Phosphate-P	99.8	100	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P362397

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078905	Acetochlor	93.2	94.2	P/P	63 - 129
2078905	Alachlor	89.9	89.6	P/P	65 - 127
2078905	Ametryn	92.4	94.3	P/P	40 - 164
2078905	Atrazine Desethyl	63.2	58.8	P/P	14 - 157
2078905	Azinphos Methyl	94.5	90.1	P/P	49 - 180
2078905	Butylate	46.5	47.6	P/P	10 - 94.0
2078905	Chlorpyrifos Ethyl	97.4	98.2	P/P	58 - 123
2078905	Chlorpyrifos Methyl	92.9	91.1	P/P	58 - 125
2078905	Cyanazine	108	97.0	P/P	24 - 253
2078905	Demeton	85.6	82.4	P/P	25 - 149
2078905	Diazinon	98.9	98.1	P/P	59 - 144
2078905	Dimethenamid	93.0	91.7	P/P	46 - 139
2078905	Disulfoton	90.9	84.6	P/P	54 - 132
2078905	Dithiopyr	95.9	96.5	P/P	64 - 130
2078905	EPTC	48.7	51.9	P/P	10 - 92.0
2078905	Ethion	101	98.2	P/P	30 - 148
2078905	Ethoprop	91.4	90.1	P/P	50 - 130
2078905	Fenamiphos	89.0	92.4	P/P	49 - 142
2078905	Fipronil	80.1	75.2	P/P	46 - 140
2078905	Fipronil Desulfinyl	68.7	66.3	P/P	30 - 121
2078905	Fipronil Sulfide	71.4	65.1	P/P	31 - 136
2078905	Fipronil Sulfone	52.7	45.4	P/P	16 - 136
2078905	Fonofos	93.1	91.2	P/P	55 - 129
2078905	Hexazinone	100	172	P/F	56 - 141
2078905	Malathion	95.6	92.3	P/P	56 - 135
2078905	Metalaxyl	90.4	82.6	P/P	54 - 135
2078905	Metolachlor	90.3	92.5	P/P	51 - 140
2078905	Mevinphos	77.1	83.1	P/P	33 - 131
2078905	Molinate	65.9	66.6	P/P	14 - 98.0
2078905	Norflurazon	77.6	72.3	P/P	34 - 136
2078905	Oxadiazon	94.8	94.8	P/P	67 - 116
2078905	Parathion Ethyl	95.5	92.5	P/P	66 - 118
2078905	Parathion Methyl	99.7	96.5	P/P	64 - 136
2078905	Pendimethalin	120	119	P/P	59 - 144
2078905	Phorate	82.3	79.2	P/P	42 - 130
2078905	Prodiamine	124	123	P/P	42 - 148
2078905	Prometon	93.7	121	P/P	59 - 134
2078905	Prometryn	95.0	92.9	P/P	54 - 135
2078905	Tebuconazole	78.9	75.2	P/P	10 - 131
2078905	Terbufos	99.5	92.6	P/P	57 - 131

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P362397

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078905	Terbuthylazine	96.7	94.8	P/P	68 - 125

Reference Method: EPA 8270D
Batch ID: P362502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078861	Aldrin	68.6	66.2	P/P	25 - 92.0
2078861	Alpha-BHC	106	110	P/P	49 - 130
2078861	Alpha-Chlordane	98.9	94.3	P/P	50 - 115
2078861	Beta-BHC	104	108	P/P	43 - 157
2078861	Bifenthrin	101	97.8	P/P	50 - 130
2078861	Carbophenothion	125	123	P/P	27 - 180
2078861	Chlorothalonil	157	149	P/P	10 - 216
2078861	Cis-Nonachlor	110	101	P/P	50 - 130
2078861	Cypermethrin	118	113	P/P	40 - 153
2078861	DDD-p,p'	131	110	F/P	53 - 128
2078861	DDE-p,p'	89.7	83.0	P/P	48 - 116
2078861	DDT-p,p'	92.1	88.7	P/P	47 - 128
2078861	Delta-BHC	146	139	P/P	51 - 196
2078861	Dicofol	98.8	92.4	P/P	10 - 147
2078861	Dieldrin	102	98.3	P/P	48 - 128
2078861	Endosulfan I	113	114	P/P	58 - 126
2078861	Endosulfan II	339	337	F/F	50 - 150
2078861	Endosulfan Sulfate	112	116	P/P	56 - 130
2078861	Endrin	109	103	P/P	50 - 126
2078861	Endrin Aldehyde	135	112	P/P	12 - 145
2078861	Endrin Ketone	125	133	P/F	59 - 132
2078861	Ethalfluralin	94.3	89.9	P/P	50 - 130
2078861	Gamma-BHC	204	193	F/F	50 - 155
2078861	Gamma-Chlordane	93.6	88.9	P/P	50 - 112
2078861	Heptachlor	88.8	86.7	P/P	41 - 98.0
2078861	Heptachlor Epoxide	102	102	P/P	55 - 117
2078861	Hexachlorobenzene	74.4	64.8	P/P	50 - 130
2078861	Methoxychlor	133	116	P/P	55 - 133
2078861	Mirex	67.5	66.5	P/P	44 - 101
2078861	Permethrin	78.5	77.0	P/P	52 - 124
2078861	Trans-Nonachlor	87.1	80.9	P/P	50 - 130
2078861	Trifluralin	87.9	86.4	P/P	10 - 201

Reference Method: EPA 8276
Batch ID: P362502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2079240	Chlordane	93.6	76.7	P/P	34 - 136
2079240	Toxaphene	81.4	83.0	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P362252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078237	2,4-D	86.5	87.4	P/P	40 - 150
2078237	Acetaminophen	77.5	83.3	P/P	30 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P362252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078237	Bentazon	67.3	66.2	P/P	30 - 150
2078237	Carbamazepine	86.6	94.4	P/P	40 - 150
2078237	Diuron	72.2	70.7	P/P	40 - 150
2078237	Fenuron	96.8	109	P/P	40 - 150
2078237	Fluridone	176	72.4	F/P	40 - 150
2078237	Hydrocodone	93.7	94.9	P/P	40 - 150
2078237	Ibuprofen	65.0	61.0	P/P	40 - 150
2078237	Imazapyr	97.0	55.2	P/P	40 - 150
2078237	Imidacloprid	159	170	F/F	40 - 150
2078237	Linuron	70.9	72.5	P/P	40 - 150
2078237	MCPP	101	105	P/P	40 - 150
2078237	Naproxen	69.9	56.9	P/P	40 - 150
2078237	Primidone	67.6	64.2	P/P	40 - 150
2078237	Pyraclostrobin	74.6	80.8	P/P	40 - 150
2078237	Triclopyr	61.2	56.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P362343

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2079440	3-Hydroxycarbofuran	85.8	95.0	P/P	40 - 150
2079440	Aldicarb	84.0	86.1	P/P	30 - 150
2079440	Aldicarb Sulfone	92.1	86.9	P/P	40 - 150
2079440	Aldicarb Sulfoxide	50.3	57.3	P/P	40 - 150
2079440	Carbaryl	75.0	78.1	P/P	40 - 150
2079440	Carbofuran	74.4	75.7	P/P	40 - 150
2079440	Methiocarb	68.0	65.4	P/P	40 - 150
2079440	Methomyl	81.0	92.0	P/P	40 - 150
2079440	Oxamyl	92.3	94.3	P/P	40 - 150
2079440	Propoxur	77.1	74.2	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P362469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078457	Acesulfame K	102	86.1	P/P	40 - 150
2078457	AMPA	147	145	P/P	40 - 150
2078457	Endothall	103	105	P/P	40 - 150
2078457	Glufosinate	112	123	P/P	40 - 150
2078457	Glyphosate	113	114	P/P	40 - 140
2078457	Sucralose	76.2	93.8	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P362722

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2074740	Fluoride	97.8	97.8	P/P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P362951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P362951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078751	Fluoride	97.3	97.3	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P362486

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078623	Organic Carbon	98.2	98.8	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P362487

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2078600	Organic Carbon	96.7	97.2	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P362374

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078856	Turbidity	2.19	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P362362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2077433	Iron	0.563	Spike	P	0 - 20
2077433	Manganese	0.209	Spike	P	0 - 20
2077433	Zinc	0.343	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P362614

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2079154	Barium	0.856	Spike	P	0 - 20
2079154	Calcium	1.79	Spike	P	0 - 20
2079154	Iron	1.16	Spike	P	0 - 20
2079154	Magnesium	1.57	Spike	P	0 - 20
2079154	Potassium	0.811	Spike	P	0 - 20
2079154	Sodium	0.138	Spike	P	0 - 20
2079154	Zinc	1.25	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2077433	Aluminum	1.59	Spike	P	0 - 20
2077433	Antimony	3.22	Spike	P	0 - 20
2077433	Arsenic	3.49	Spike	P	0 - 20
2077433	Cadmium	4.90	Spike	P	0 - 20
2077433	Chromium	1.84	Spike	P	0 - 20
2077433	Copper	1.74	Spike	P	0 - 20
2077433	Lead	3.35	Spike	P	0 - 20
2077433	Nickel	3.09	Spike	P	0 - 20
2077433	Selenium	0.248	Spike	P	0 - 20
2077433	Silver	0.268	Spike	P	0 - 20
2077433	Thallium	2.91	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362614

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2079154	Aluminum	1.37	Spike	P	0 - 20
2079154	Antimony	0.522	Spike	P	0 - 20
2079154	Arsenic	0.0398	Spike	P	0 - 20
2079154	Boron	1.38	Spike	P	0 - 20
2079154	Cadmium	1.49	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P362614

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2079154	Chromium	0.876	Spike	P	0 - 20
2079154	Copper	0.0551	Spike	P	0 - 20
2079154	Lead	0.408	Spike	P	0 - 20
2079154	Nickel	0.0864	Spike	P	0 - 20
2079154	Selenium	0.387	Spike	P	0 - 20
2079154	Silver	1.17	Spike	P	0 - 20
2079154	Thallium	1.91	Spike	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P362586

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2076447	Bromide	1.41	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078704	Chloride	0.0472	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362596

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078704	Sulfate	0.365	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362821

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078783	Chloride	0.00717	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P362824

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078783	Sulfate	0.202	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P362715

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078380	Ammonia-N	0.0398	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P362725

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078899	Ammonia-N	1.20	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P362704

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078734	Kjeldahl Nitrogen	4.33	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P362841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2079178	Kjeldahl Nitrogen	1.19	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078626	NO2NO3-N	0.471	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362766

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078693	NO2NO3-N	0.837	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P362767

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078784	NO2NO3-N	1.13	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078600	Total-P	2.56	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362616

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078718	Total-P	0.180	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P362617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078900	Total-P	1.58	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P362367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078781	O-Phosphate-P	1.11	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P362368

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078747	O-Phosphate-P	0.699	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P362397

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078905	Acetochlor	1.11	Spike	P	0 - 30
2078905	Alachlor	0.334	Spike	P	0 - 30
2078905	Ametryn	1.55	Spike	P	0 - 30
2078905	Atrazine	1.89	Spike	P	0 - 30
2078905	Atrazine Desethyl	5.13	Spike	P	0 - 30
2078905	Azinphos Methyl	4.78	Spike	P	0 - 30
2078905	Bromacil	4.83	Spike	P	0 - 30
2078905	Butylate	2.38	Spike	P	0 - 30
2078905	Chlorpyrifos Ethyl	0.884	Spike	P	0 - 30
2078905	Chlorpyrifos Methyl	1.94	Spike	P	0 - 30
2078905	Cyanazine	10.9	Spike	P	0 - 30
2078905	Demeton	3.78	Spike	P	0 - 30
2078905	Diazinon	0.864	Spike	P	0 - 30
2078905	Dimethenamid	1.46	Spike	P	0 - 30
2078905	Disulfoton	7.18	Spike	P	0 - 30
2078905	Dithiopyr	0.549	Spike	P	0 - 30
2078905	EPTC	6.41	Spike	P	0 - 30
2078905	Ethion	2.36	Spike	P	0 - 30
2078905	Ethoprop	1.10	Spike	P	0 - 30
2078905	Fenamiphos	3.79	Spike	P	0 - 30
2078905	Fipronil	5.70	Spike	P	0 - 30
2078905	Fipronil Desulfinyl	2.99	Spike	P	0 - 30
2078905	Fipronil Sulfide	7.15	Spike	P	0 - 30
2078905	Fipronil Sulfone	8.46	Spike	P	0 - 30
2078905	Fonofos	2.08	Spike	P	0 - 30
2078905	Hexazinone	46.0	Spike	F	0 - 30
2078905	Malathion	3.47	Spike	P	0 - 30
2078905	Metalaxyl	8.69	Spike	P	0 - 30
2078905	Metolachlor	1.40	Spike	P	0 - 30
2078905	Metribuzin	7.82	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P362397

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078905	Mevinphos	7.50	Spike	P	0 - 30
2078905	Molinate	1.09	Spike	P	0 - 30
2078905	Norflurazon	7.07	Spike	P	0 - 30
2078905	Oxadiazon	0.00932	Spike	P	0 - 30
2078905	Parathion Ethyl	3.23	Spike	P	0 - 30
2078905	Parathion Methyl	3.21	Spike	P	0 - 30
2078905	Pendimethalin	1.32	Spike	P	0 - 30
2078905	Phorate	3.83	Spike	P	0 - 30
2078905	Prodiamine	0.994	Spike	P	0 - 30
2078905	Prometon	25.4	Spike	P	0 - 30
2078905	Prometryn	2.21	Spike	P	0 - 30
2078905	Simazine	0.137	Spike	P	0 - 30
2078905	Tebuconazole	4.00	Spike	P	0 - 30
2078905	Terbufos	7.11	Spike	P	0 - 30
2078905	Terbuthylazine	2.03	Spike	P	0 - 30
LFB	Acetochlor	3.46	LCS	P	0 - 30
LFB	Alachlor	2.74	LCS	P	0 - 30
LFB	Ametryn	46.1	LCS	F	0 - 30
LFB	Atrazine	0.615	LCS	P	0 - 30
LFB	Atrazine Desethyl	5.45	LCS	P	0 - 30
LFB	Azinphos Methyl	4.94	LCS	P	0 - 30
LFB	Bromacil	34.7	LCS	F	0 - 30
LFB	Butylate	0.548	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	1.69	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	6.83	LCS	P	0 - 30
LFB	Cyanazine	2.41	LCS	P	0 - 30
LFB	Demeton	6.40	LCS	P	0 - 30
LFB	Diazinon	3.46	LCS	P	0 - 30
LFB	Dimethenamid	3.42	LCS	P	0 - 30
LFB	Disulfoton	3.61	LCS	P	0 - 30
LFB	Dithiopyr	2.59	LCS	P	0 - 30
LFB	EPTC	4.42	LCS	P	0 - 30
LFB	Ethion	1.22	LCS	P	0 - 30
LFB	Ethoprop	4.42	LCS	P	0 - 30
LFB	Fenamiphos	74.0	LCS	F	0 - 30
LFB	Fipronil	12.0	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	6.75	LCS	P	0 - 30
LFB	Fipronil Sulfide	5.39	LCS	P	0 - 30
LFB	Fipronil Sulfone	11.8	LCS	P	0 - 30
LFB	Fonofos	0.370	LCS	P	0 - 30
LFB	Hexazinone	96.3	LCS	F	0 - 30
LFB	Malathion	3.35	LCS	P	0 - 30
LFB	Metalaxyl	37.0	LCS	F	0 - 30
LFB	Metolachlor	3.58	LCS	P	0 - 30
LFB	Metribuzin	0.906	LCS	P	0 - 30
LFB	Mevinphos	63.1	LCS	F	0 - 30
LFB	Molinate	4.11	LCS	P	0 - 30
LFB	Norflurazon	12.9	LCS	P	0 - 30
LFB	Oxadiazon	1.35	LCS	P	0 - 30
LFB	Parathion Ethyl	1.04	LCS	P	0 - 30
LFB	Parathion Methyl	2.08	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P362397

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Pendimethalin	6.04	LCS	P	0 - 30
LFB	Phorate	2.36	LCS	P	0 - 30
LFB	Prodiamine	0.668	LCS	P	0 - 30
LFB	Prometon	20.0	LCS	P	0 - 30
LFB	Prometryn	39.2	LCS	F	0 - 30
LFB	Simazine	8.61	LCS	P	0 - 30
LFB	Tebuconazole	118	LCS	F	0 - 30
LFB	Terbufos	2.69	LCS	P	0 - 30
LFB	Terbuthylazine	2.59	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P362502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078861	Aldrin	3.53	Spike	P	0 - 30
2078861	Alpha-BHC	3.90	Spike	P	0 - 30
2078861	Alpha-Chlordane	4.77	Spike	P	0 - 30
2078861	Beta-BHC	4.03	Spike	P	0 - 30
2078861	Bifenthrin	2.86	Spike	P	0 - 30
2078861	Carbophenothion	1.71	Spike	P	0 - 30
2078861	Chlorothalonil	4.84	Spike	P	0 - 30
2078861	Cis-Nonachlor	9.26	Spike	P	0 - 30
2078861	Cypermethrin	4.01	Spike	P	0 - 30
2078861	DDD-p,p'	17.7	Spike	P	0 - 30
2078861	DDE-p,p'	7.76	Spike	P	0 - 30
2078861	DDT-p,p'	3.81	Spike	P	0 - 30
2078861	Delta-BHC	4.94	Spike	P	0 - 30
2078861	Dicofol	6.69	Spike	P	0 - 30
2078861	Dieldrin	3.98	Spike	P	0 - 30
2078861	Endosulfan I	1.30	Spike	P	0 - 30
2078861	Endosulfan II	0.680	Spike	P	0 - 30
2078861	Endosulfan Sulfate	3.52	Spike	P	0 - 30
2078861	Endrin	5.86	Spike	P	0 - 30
2078861	Endrin Aldehyde	17.9	Spike	P	0 - 30
2078861	Endrin Ketone	6.07	Spike	P	0 - 30
2078861	Ethalfluralin	4.83	Spike	P	0 - 30
2078861	Gamma-BHC	5.89	Spike	P	0 - 30
2078861	Gamma-Chlordane	5.20	Spike	P	0 - 30
2078861	Heptachlor	2.40	Spike	P	0 - 30
2078861	Heptachlor Epoxide	0.573	Spike	P	0 - 30
2078861	Hexachlorobenzene	13.8	Spike	P	0 - 30
2078861	Methoxychlor	13.2	Spike	P	0 - 30
2078861	Mirex	1.45	Spike	P	0 - 30
2078861	Permethrin	1.91	Spike	P	0 - 30
2078861	Trans-Nonachlor	7.45	Spike	P	0 - 30
2078861	Trifluralin	1.65	Spike	P	0 - 30
LFB	Aldrin	17.4	LCS	P	0 - 30
LFB	Alpha-BHC	13.8	LCS	P	0 - 30
LFB	Alpha-Chlordane	4.47	LCS	P	0 - 30
LFB	Beta-BHC	2.02	LCS	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270D
Batch ID: P362502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Bifenthrin	8.92	LCS	P	0 - 30
LFB	Carbophenothion	6.60	LCS	P	0 - 30
LFB	Chlorothalonil	24.7	LCS	P	0 - 30
LFB	Cis-Nonachlor	13.3	LCS	P	0 - 30
LFB	Cypermethrin	14.1	LCS	P	0 - 30
LFB	DDD-p,p'	8.22	LCS	P	0 - 30
LFB	DDE-p,p'	3.34	LCS	P	0 - 30
LFB	DDT-p,p'	5.40	LCS	P	0 - 30
LFB	Delta-BHC	0.0336	LCS	P	0 - 30
LFB	Dicofol	1.99	LCS	P	0 - 30
LFB	Dieldrin	7.54	LCS	P	0 - 30
LFB	Endosulfan I	3.97	LCS	P	0 - 30
LFB	Endosulfan II	7.27	LCS	P	0 - 30
LFB	Endosulfan Sulfate	1.93	LCS	P	0 - 30
LFB	Endrin	3.77	LCS	P	0 - 30
LFB	Endrin Aldehyde	13.4	LCS	P	0 - 30
LFB	Endrin Ketone	1.05	LCS	P	0 - 30
LFB	Ethalfluralin	6.96	LCS	P	0 - 30
LFB	Gamma-BHC	6.75	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.77	LCS	P	0 - 30
LFB	Heptachlor	10.1	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.550	LCS	P	0 - 30
LFB	Hexachlorobenzene	25.5	LCS	P	0 - 30
LFB	Methoxychlor	4.82	LCS	P	0 - 30
LFB	Mirex	6.54	LCS	P	0 - 30
LFB	Permethrin	9.25	LCS	P	0 - 30
LFB	Trans-Nonachlor	0.0148	LCS	P	0 - 30
LFB	Trifluralin	3.20	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P362502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2079240	Chlordane	19.9	Spike	P	0 - 30
2079240	Toxaphene	1.98	Spike	P	0 - 30
LFB	Chlordane	8.34	LCS	P	0 - 30
LFB	Toxaphene	8.15	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P362252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078237	2,4-D	0.554	Spike	P	0 - 30
2078237	Acetaminophen	7.21	Spike	P	0 - 30
2078237	Bentazon	0.814	Spike	P	0 - 30
2078237	Carbamazepine	8.15	Spike	P	0 - 30
2078237	Diuron	2.18	Spike	P	0 - 30
2078237	Fenuron	12.0	Spike	P	0 - 30
2078237	Fluridone	20.4	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P362252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078237	Hydrocodone	1.28	Spike	P	0 - 30
2078237	Ibuprofen	6.24	Spike	P	0 - 30
2078237	Imazapyr	24.0	Spike	P	0 - 30
2078237	Imidacloprid	6.54	Spike	P	0 - 30
2078237	Linuron	2.32	Spike	P	0 - 30
2078237	MCPP	4.19	Spike	P	0 - 30
2078237	Naproxen	20.6	Spike	P	0 - 30
2078237	Primidone	4.56	Spike	P	0 - 30
2078237	Pyraclostrobin	8.08	Spike	P	0 - 30
2078237	Triclopyr	8.83	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P362343

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2079440	3-Hydroxycarbofuran	10.2	Spike	P	0 - 30
2079440	Aldicarb	2.51	Spike	P	0 - 30
2079440	Aldicarb Sulfone	5.81	Spike	P	0 - 30
2079440	Aldicarb Sulfoxide	13.2	Spike	P	0 - 30
2079440	Carbaryl	3.93	Spike	P	0 - 30
2079440	Carbofuran	1.68	Spike	P	0 - 30
2079440	Methiocarb	3.97	Spike	P	0 - 30
2079440	Methomyl	12.8	Spike	P	0 - 30
2079440	Oxamyl	2.14	Spike	P	0 - 30
2079440	Propoxur	3.79	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P362469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078457	Acesulfame K	16.8	Spike	P	0 - 30
2078457	AMPA	1.17	Spike	P	0 - 30
2078457	Endothall	1.13	Spike	P	0 - 30
2078457	Glufosinate	9.39	Spike	P	0 - 30
2078457	Glyphosate	1.08	Spike	P	0 - 30
2078457	Sucralose	20.7	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P362389

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078751	Color (true)	0.861	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P362720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits

Quality Assurance Report
Precision

Reference Method: SM 2320 B-97
Batch ID: P362720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078625	Total Alkalinity	0.551	Sample	P	0 - 2.8

Reference Method: SM 2320 B-97
Batch ID: P362947

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078751	Total Alkalinity	0.124	Sample	P	0 - 2.8

Reference Method: SM 2320 B-97
Batch ID: P363067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2079855	Total Alkalinity	0.961	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P363046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078733	TDS	3.05	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P363047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078967	TDS	5.55	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P362722

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2074740	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
Batch ID: P362951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078751	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P362486

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078623	Organic Carbon	0.328	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 5310 B-00
Batch ID: P362487

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2078600	Organic Carbon	0.438	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report
Surrogates

Lab Sample ID: 2078800
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	77.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.9	P	30 - 160
EPA 8321B	Diuron-d6	73.6	P	30 - 160
EPA 8321B	Endothall-d6	330	F	30 - 160
EPA 8321B	Endothall-d6	330	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	133	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	133	P	30 - 160
EPA 8321B	Ibuprofen-d3	48.9	P	30 - 160
EPA 8321B	Primidone-d5	75.0	P	30 - 160
EPA 8321B	Sucralose-d6	93.2	P	30 - 160
EPA 8321B	Sucralose-d6	93.2	P	30 - 160

Lab Sample ID: 2078902
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	70.6	P	30 - 160

Lab Sample ID: 2078904
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	85.3	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	63.3	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	54.2	P	30 - 103
EPA 8276	PCNB	108	P	37 - 143

Lab Sample ID: 2078905
Field Sample ID: G2NE1180

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	96.3	P	68 - 130
EPA 8270D	Terbufos-d10	87.5	P	61 - 136

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Reference Method: EPA 300.0 Rev. 2.1
Run ID: A90760
Included Lab Sample IDs: 2078779, 2078782

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Sulfate	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A90794
Included Lab Sample IDs: 2078778, 2078781, 2078786, 2078787, 2078790

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	101	P/P	90 - 110
O-Phosphate-P	98.2	99.9	P/P	90 - 110
O-Phosphate-P	99.9	96.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A90795
Included Lab Sample IDs: 2078776, 2078779, 2078782, 2078783, 2078788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105

Reference Method: SM 2120 B
Run ID: A90804
Included Lab Sample IDs: 2078779, 2078782, 2078783

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	102	P/P	90 - 115

Reference Method: EPA 300.0
Run ID: A90809
Included Lab Sample IDs: 2078776, 2078788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	101	104	P/P	90 - 110
Bromide	104	104	P/P	90 - 110

Reference Method: SM 5310 B-00
Run ID: A90843
Included Lab Sample IDs: 2078777, 2078780, 2078784, 2078785, 2078789

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	99.6	P/P	90 - 110
Organic Carbon	99.2	100	P/P	90 - 110
Organic Carbon	99.6	99.2	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A90848
Included Lab Sample IDs: 2078800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.9	98.0	P/P	50 - 150
Acetaminophen	84.5	93.3	P/P	60 - 160
Bentazon	113	111	P/P	50 - 160

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Reference Method: EPA 8321B
Run ID: A90848
Included Lab Sample IDs: 2078800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbamazepine	103	102	P/P	60 - 150
Diuron	100	99.5	P/P	60 - 150
Fenuron	100	104	P/P	60 - 150
Fluridone	62.6	98.6	P/P	60 - 160
Hydrocodone	91.3	88.6	P/P	60 - 150
Ibuprofen	111	125	P/P	50 - 160
Imazapyr	102	99.2	P/P	50 - 150
Imidacloprid	87.8	93.8	P/P	60 - 150
Linuron	93.3	93.2	P/P	60 - 150
MCPP	92.7	85.1	P/P	50 - 150
Naproxen	82.0	83.1	P/P	50 - 160
Primidone	89.2	79.1	P/P	60 - 150
Pyraclostrobin	136	133	P/P	60 - 150
Triclopyr	101	99.2	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A90878
Included Lab Sample IDs: 2078800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	118	140	P/P	60 - 160
Endothall	107	117	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A90906
Included Lab Sample IDs: 2078924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	99.6	101	P/P	90 - 110
Manganese	102	102	P/P	90 - 110
Zinc	99.3	98.9	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A90917
Included Lab Sample IDs: 2078800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	119	128	P/P	60 - 160
Glufosinate	122	117	P/P	60 - 160
Glyphosate	118	115	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A90918
Included Lab Sample IDs: 2078780

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	99.0	P/P	90 - 110

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Reference Method: EPA 365.1 Rev. 2.0
Run ID: A90927
Included Lab Sample IDs: 2078777, 2078780, 2078785, 2078789

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	102	P/P	90 - 110
Total-P	102	101	P/P	90 - 110
Total-P	104	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A90934
Included Lab Sample IDs: 2078784

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	99.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A90946
Included Lab Sample IDs: 2078780

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	107	107	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A90948
Included Lab Sample IDs: 2078779

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.9	99.7	P/P	90 - 110

Reference Method: SM 4500 F-C-97
Run ID: A90948
Included Lab Sample IDs: 2078779

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.6	99.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A90949
Included Lab Sample IDs: 2078777, 2078784, 2078785, 2078789

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A90953
Included Lab Sample IDs: 2078902

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	90.4	110	P/P	60 - 150
Aldicarb	102	117	P/P	60 - 150
Aldicarb Sulfone	101	96.2	P/P	50 - 150
Aldicarb Sulfoxide	103	101	P/P	50 - 150
Carbaryl	101	104	P/P	60 - 150
Carbofuran	99.3	105	P/P	50 - 150
Methiocarb	101	97.2	P/P	50 - 150

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Reference Method: EPA 8321B
Run ID: A90953
Included Lab Sample IDs: 2078902

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Methomyl	95.4	99.9	P/P	50 - 150
Oxamyl	102	97.9	P/P	50 - 150
Propoxur	104	102	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A90961
Included Lab Sample IDs: 2078783

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	101	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A90968
Included Lab Sample IDs: 2078777, 2078784, 2078785, 2078789

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.5	P/P	90 - 110
NO2NO3-N	99.0	98.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A90983
Included Lab Sample IDs: 2078804, 2078805

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	100	99.8	P/P	90 - 110
Calcium	103	101	P/P	90 - 110
Iron	100	102	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Potassium	98.2	97.6	P/P	90 - 110
Sodium	98.8	100	P/P	90 - 110
Zinc	101	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A90990
Included Lab Sample IDs: 2078800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	96.5	99.2	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A90992
Included Lab Sample IDs: 2078777, 2078784, 2078785, 2078789

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	92.8	95.2	P/P	90 - 110

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Reference Method: EPA 200.8 Rev. 5.4
Run ID: A90993
Included Lab Sample IDs: 2078804, 2078805

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	96.1	95.7	P/P	90 - 110
Antimony	94.0	91.9	P/P	90 - 110
Arsenic	96.0	94.7	P/P	90 - 110
Boron	96.1	101	P/P	90 - 110
Cadmium	95.9	95.0	P/P	90 - 110
Chromium	95.2	97.1	P/P	90 - 110
Copper	96.1	95.2	P/P	90 - 110
Lead	102	101	P/P	90 - 110
Nickel	95.0	95.3	P/P	90 - 110
Selenium	95.3	95.5	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A91002
Included Lab Sample IDs: 2078904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.8		P	80 - 120
Toxaphene	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A91019
Included Lab Sample IDs: 2078924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.4	94.7	P/P	90 - 110
Antimony	99.2	98.6	P/P	90 - 110
Arsenic	100	100	P/P	90 - 110
Cadmium	97.1	96.7	P/P	90 - 110
Copper	99.0	100	P/P	90 - 110
Lead	91.5	91.6	P/P	90 - 110
Nickel	99.3	99.5	P/P	90 - 110
Selenium	100	98.8	P/P	90 - 110
Silver	95.9	95.7	P/P	90 - 110
Thallium	97.7	98.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A91020
Included Lab Sample IDs: 2078780

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	98.4	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A91045
Included Lab Sample IDs: 2078776, 2078782, 2078788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.9	P/P	90 - 110

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Reference Method: SM 4500 F-C-97
Run ID: A91045
Included Lab Sample IDs: 2078776, 2078782, 2078783, 2078788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	98.6	P/P	90 - 110

Reference Method: EPA 8270D
Run ID: A91053
Included Lab Sample IDs: 2078905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	105		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	99.3		P	80 - 120
Atrazine Desethyl	86.9		P	80 - 120
Azinphos Methyl	96.9		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	97.0		P	80 - 120
Chlorpyrifos Ethyl	99.0		P	80 - 120
Chlorpyrifos Methyl	97.9		P	80 - 120
Cyanazine	86.5		P	80 - 120
Demeton	80.2		P	80 - 120
Diazinon	101		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	96.7		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	101		P	80 - 120
Ethion	95.9		P	80 - 120
Ethoprop	97.8		P	80 - 120
Fenamiphos	95.6		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	96.6		P	80 - 120
Fipronil Sulfone	96.4		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	99.1		P	80 - 120
Malathion	96.5		P	80 - 120
Metalaxyl	107		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	73.0*		F	80 - 120
Mevinphos	98.2		P	80 - 120
Molinate	94.9		P	80 - 120
Norflurazon	103		P	80 - 120
Oxadiazon	106		P	80 - 120
Parathion Ethyl	95.4		P	80 - 120
Parathion Methyl	96.2		P	80 - 120
Pendimethalin	97.0		P	80 - 120
Phorate	95.6		P	80 - 120
Prodiamine	99.7		P	80 - 120
Prometon	102		P	80 - 120
Prometryn	105		P	80 - 120
Simazine	99.9		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	94.7		P	80 - 120

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Reference Method: EPA 8270D
Run ID: A91053
Included Lab Sample IDs: 2078905

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbuthylazine	96.2		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A91077
Included Lab Sample IDs: 2078804, 2078805

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	102	102	P/P	90 - 110
Thallium	96.2	95.6	P/P	90 - 110

Reference Method: SM 2320 B-97
Run ID: A91081
Included Lab Sample IDs: 2078783

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	98.9	P/P	90 - 110

Reference Method: EPA 8270D
Run ID: A91082
Included Lab Sample IDs: 2078904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.6		P	80 - 120
Alpha-BHC	96.9		P	80 - 120
Alpha-Chlordane	96.6		P	80 - 120
Beta-BHC	103		P	80 - 120
Bifenthrin	94.0		P	80 - 120
Carbophenothion	82.3		P	80 - 120
Chlorothalonil	85.2		P	80 - 120
Cis-Nonachlor	91.0		P	80 - 120
Cypermethrin	88.0		P	80 - 120
DDD-p,p'	91.8		P	80 - 120
DDE-p,p'	91.8		P	80 - 120
DDT-p,p'	97.7		P	80 - 120
Delta-BHC	98.6		P	80 - 120
Dicofol	97.4		P	80 - 120
Dieldrin	91.9		P	80 - 120
Endosulfan I	94.9		P	80 - 120
Endosulfan II	88.1		P	80 - 120
Endosulfan Sulfate	88.0		P	80 - 120
Endrin	91.5		P	80 - 120
Endrin Aldehyde	82.3		P	80 - 120
Endrin Ketone	94.0		P	80 - 120
Ethalfluralin	95.3		P	80 - 120
Gamma-BHC	103		P	80 - 120
Gamma-Chlordane	98.8		P	80 - 120
Heptachlor	90.3		P	80 - 120
Heptachlor Epoxide	93.7		P	80 - 120
Hexachlorobenzene	95.2		P	80 - 120
Methoxychlor	102		P	80 - 120
Mirex	96.1		P	80 - 120

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Reference Method: EPA 8270D
Run ID: A91082
Included Lab Sample IDs: 2078904

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Permethrin	95.1		P	80 - 120
Trans-Nonachlor	94.4		P	80 - 120
Trifluralin	94.8		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A91145
Included Lab Sample IDs: 2078924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	95.1	93.2	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision		
							LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							2.19	
EPA 200.7 Rev. 4.4	Barium	96.1		95.3	96.7	97.5			0.856
	Calcium	106		98.6	107	105			1.79
	Iron	106		100	101				0.563
	Iron	103		105	106	105			1.16
	Magnesium	110		100	112	110			1.57
	Manganese	102		97.9	97.6				0.209
	Potassium	103		101	108	108			0.811
	Sodium	105		99.0	102	102			0.138
	Zinc	100		101	100				0.343
	Zinc	97.0		97.1	98.1	99.4			1.25
EPA 200.8 Rev. 5.4	Aluminum	96.4		97.0	95.4				1.59
	Aluminum	93.1		90.8	91.0	89.6			1.37
	Antimony	99.0		101	97.6				3.22
	Antimony	91.8		91.8	90.2	89.8			0.522
	Arsenic	102		109	105				3.49
	Arsenic	95.2		94.4	92.6	92.6			0.0398
	Boron	94.6		95.9	95.7	94.3			1.38
	Cadmium	101		97.6	92.9				4.90
	Cadmium	95.9		95.1	94.0	92.7			1.49
	Chromium	92.3		89.3	87.7				1.84
	Chromium	87.7		87.5	89.2	88.4			0.876
	Copper	98.9		95.3	93.5				1.74
	Copper	93.1		89.4	93.2	93.2			0.0551
	Lead	92.5		96.6	93.5				3.35
	Lead	96.5		96.4	96.8	96.4			0.408
	Nickel	100		99.4	96.4				3.09
	Nickel	93.3		90.6	93.1	93.1			0.0864
	Selenium	100		99.3	99.0				0.248
	Selenium	94.2		92.2	91.2	91.5			0.387
	Silver	96.8		89.7	89.5				0.268
	Silver	113		112	110	112			1.17
	Thallium	103		106	103				2.91
	Thallium	90.8		112	109	111			1.91
EPA 300.0	Bromide	103		102	100				1.41
EPA 300.0 Rev. 2.1	Chloride	98.9		99.8	100			0.0472	
	Chloride	100		96.5	99.2			0.0071	
	Sulfate	101		101				0.365	
	Sulfate	99.7		96.5	97.9			0.202	
EPA 350.1 Rev. 2.0	Ammonia-N	107		107	107				0.0398
	Ammonia-N	102		99.8	101				1.20
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104							4.33
	Kjeldahl Nitrogen	102		101	102				1.19
EPA 353.2 Rev. 2.0	NO2NO3-N	100		98.7	98.2				0.471
	NO2NO3-N	99.0		97.2					0.837
	NO2NO3-N	98.5		100	98.6				1.13
EPA 365.1 Rev. 2.0	Total-P	101		90.9	93.4				2.56
	Total-P	103		101	101				0.180
	Total-P	98.6		98.4	96.7				1.58
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102		97.6	99.2				1.11
	O-Phosphate-P	101		99.8	100				0.699
EPA 8270D	Acetochlor	101	104	93.2	94.2		3.46		1.11
	Alachlor	102	99.7	89.9	89.6		2.74		0.334
	Aldrin	56.3	47.3	68.6	66.2		17.4		3.53

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Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270D	Alpha-BHC	105	91.5	106	110	13.8		3.90
	Alpha-Chlordane	78.7	82.3	98.9	94.3	4.47		4.77
	Ametryn	47.4	75.9	92.4	94.3	46.1		1.55
	Atrazine	96.6	97.2			0.615		1.89
	Atrazine Desethyl	52.1	49.3	63.2	58.8	5.45		5.13
	Azinphos Methyl	101	96.4	94.5	90.1	4.94		4.78
	Beta-BHC	116	114	104	108	2.02		4.03
	Bifenthrin	92.4	101	101	97.8	8.92		2.86
	Bromacil	62.2	43.8			34.7		4.83
	Butylate	58.1	58.5	46.5	47.6	0.548		2.38
	Carbophenothion	72.5	77.4	125	123	6.60		1.71
	Chlorothalonil	154	120	157	149	24.7		4.84
	Chlorpyrifos Ethyl	98.7	97.0	97.4	98.2	1.69		0.884
	Chlorpyrifos Methyl	90.9	84.9	92.9	91.1	6.83		1.94
	Cis-Nonachlor	72.8	83.2	110	101	13.3		9.26
	Cyanazine	72.2	70.5	108	97.0	2.41		10.9
	Cypermethrin	91.6	105	118	113	14.1		4.01
	DDD-p,p'	89.9	97.6	131	110	8.22		17.7
	DDE-p,p'	108	112	89.7	83.0	3.34		7.76
	DDT-p,p'	91.9	97.0	92.1	88.7	5.40		3.81
	Delta-BHC	122	122	146	139	0.0336		4.94
	Demeton	61.0	65.0	85.6	82.4	6.40		3.78
	Diazinon	98.2	94.8	98.9	98.1	3.46		0.864
	Dicofol	96.8	94.9	98.8	92.4	1.99		6.69
	Dieldrin	81.7	88.1	102	98.3	7.54		3.98
	Dimethenamid	103	99.2	93.0	91.7	3.42		1.46
	Disulfoton	84.5	81.5	90.9	84.6	3.61		7.18
	Dithiopyr	107	104	95.9	96.5	2.59		0.549
	Endosulfan I	81.7	85.0	113	114	3.97		1.30
	Endosulfan II	93.7	87.1	339	337	7.27		0.680
	Endosulfan Sulfate	111	113	112	116	1.93		3.52
	Endrin	86.0	89.3	109	103	3.77		5.86
	Endrin Aldehyde	106	121	135	112	13.4		17.9
	Endrin Ketone	109	110	125	133	1.05		6.07
	EPTC	61.0	58.3	48.7	51.9	4.42		6.41
	Ethalfluralin	92.5	86.3	94.3	89.9	6.96		4.83
	Ethion	103	104	101	98.2	1.22		2.36
	Ethoprop	88.1	84.3	91.4	90.1	4.42		1.10
	Fenamiphos	32.9	15.2	89.0	92.4	74.0		3.79
	Fipronil	103	91.4	80.1	75.2	12.0		5.70
	Fipronil Desulfinyl	101	94.3	68.7	66.3	6.75		2.99
	Fipronil Sulfide	102	96.2	71.4	65.1	5.39		7.15
	Fipronil Sulfone	97.7	86.9	52.7	45.4	11.8		8.46
	Fonofos	82.4	82.7	93.1	91.2	0.370		2.08
	Gamma-BHC	118	110	204	193	6.75		5.89
	Gamma-Chlordane	106	109	93.6	88.9	2.77		5.20
	Heptachlor	80.8	73.0	88.8	86.7	10.1		2.40
	Heptachlor Epoxide	109	110	102	102	0.550		0.573
	Hexachlorobenzene	70.8	54.8	74.4	64.8	25.5		13.8
	Hexazinone	48.4	16.9	100	172	96.3		46.0
	Malathion	101	97.5	95.6	92.3	3.35		3.47
	Metalaxyl	13.7	9.41	90.4	82.6	37.0		8.69
	Methoxychlor	116	122	133	116	4.82		13.2
	Metolachlor	104	100	90.3	92.5	3.58		1.40

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision		
						LCS	SMP	MS
EPA 8270D	Metribuzin	73.1	72.4			0.906		7.82
	Mevinphos	51.2	26.7	77.1	83.1	63.1		7.50
	Mirex	62.9	67.2	67.5	66.5	6.54		1.45
	Molinate	67.5	70.4	65.9	66.6	4.11		1.09
	Norflurazon	92.6	81.4	77.6	72.3	12.9		7.07
	Oxadiazon	110	109	94.8	94.8	1.35		0.0093
	Parathion Ethyl	90.2	89.3	95.5	92.5	1.04		3.23
	Parathion Methyl	91.2	89.4	99.7	96.5	2.08		3.21
	Pendimethalin	103	109	120	119	6.04		1.32
	Permethrin	77.4	84.9	78.5	77.0	9.25		1.91
	Phorate	73.7	72.0	82.3	79.2	2.36		3.83
	Prodiamine	115	114	124	123	0.668		0.994
	Prometon	22.6	27.6	93.7	121	20.0		25.4
	Prometryn	59.8	88.9	95.0	92.9	39.2		2.21
	Simazine	101	92.6			8.61		0.137
	Tebuconazole	56.4	14.6	78.9	75.2	118		4.00
	Terbufos	85.6	83.3	99.5	92.6	2.69		7.11
	Terbuthylazine	100	97.6	96.7	94.8	2.59		2.03
	Trans-Nonachlor	106	106	87.1	80.9	0.0148		7.45
	Trifluralin	87.9	85.1	87.9	86.4	3.20		1.65
EPA 8276	Chlordane	78.8	72.4	93.6	76.7	8.34		19.9
	Toxaphene	83.2	76.7	81.4	83.0	8.15		1.98
EPA 8321B	2,4-D	66.6		86.5	87.4			0.554
	3-Hydroxycarbofuran	78.6		85.8	95.0			10.2
	Acesulfame K	106		102	86.1			16.8
	Acetaminophen	88.0		77.5	83.3			7.21
	Aldicarb	76.9		84.0	86.1			2.51
	Aldicarb Sulfone	96.8		92.1	86.9			5.81
	Aldicarb Sulfoxide	103		50.3	57.3			13.2
	AMPA	116		145	147			1.17
	Bentazon	99.8		67.3	66.2			0.814
	Carbamazepine	81.6		86.6	94.4			8.15
	Carbaryl	77.9		75.0	78.1			3.93
	Carbofuran	76.8		74.4	75.7			1.68
	Diuron	79.2		72.2	70.7			2.18
	Endothall	114		103	105			1.13
	Fenuron	103		96.8	109			12.0
	Fluridone	110		176	72.4			20.4
	Glufosinate	119		123	112			9.39
	Glyphosate	118		114	113			1.08
	Hydrocodone	74.3		93.7	94.9			1.28
	Ibuprofen	79.5		65.0	61.0			6.24
	Imazapyr	78.4		97.0	55.2			24.0
	Imidacloprid	89.3		159	170			6.54
	Linuron	79.3		70.9	72.5			2.32
	MCPP	80.4		101	105			4.19
	Methiocarb	70.2		68.0	65.4			3.97
	Methomyl	93.2		81.0	92.0			12.8
	Naproxen	52.3		69.9	56.9			20.6
	Oxamyl	75.6		92.3	94.3			2.14
	Primidone	81.1		67.6	64.2			4.56
	Propoxur	77.3		77.1	74.2			3.79
	Pyraclostrobin	90.5		74.6	80.8			8.08
	Sucralose	107		76.2	93.8			20.7

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Triclopyr	56.2	61.2	56.0			8.83
SM 2120 B	Color (true)	104				0.861	
SM 2320 B-97	Total Alkalinity	100				0.551	
	Total Alkalinity	102				0.124	
	Total Alkalinity	102				0.961	
SM 2540 C-97	TDS					3.05	
	TDS					5.55	
SM 4500 F-C-97	Fluoride	97.2	97.8	97.8			0.0
	Fluoride	98.3	97.3	97.3			0.0
SM 5310 B-00	Organic Carbon	99.5	98.2	98.8			0.328
	Organic Carbon	98.8	96.7	97.2			0.438

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2078776, 2078779, 2078782, 2078783, 2078788
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2078804, 2078805, 2078924
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2078804, 2078805, 2078924
EPA 300.0 / E31780	Bromide in aqueous matrices	2078776, 2078788
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2078779, 2078782, 2078783
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2078779, 2078782, 2078783
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2078777, 2078780, 2078784, 2078785, 2078789
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2078777, 2078780, 2078784, 2078785, 2078789
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2078777, 2078780, 2078784, 2078785, 2078789
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2078777, 2078780, 2078784, 2078785, 2078789
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2078778, 2078781, 2078786, 2078787, 2078790
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2078904
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2078905
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2078904
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2078902
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2078800
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2078800
SM 2120 B / E31780	True Color measured at 450 nm	2078779, 2078782, 2078783
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2078776, 2078779, 2078782, 2078783, 2078788
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2078779, 2078782, 2078783
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2078776, 2078779, 2078782, 2078783, 2078788
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2078776, 2078779, 2078782, 2078783, 2078788
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2078777, 2078780, 2078784, 2078785, 2078789

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	04/17/2019			04/17/2019 17:22	Adrian Shelby	2078776, 2078779, 2078782, 2078783, 2078788
EPA 200.7 Rev. 4.4	04/17/2019	04/17/2019 16:40	Elliott D. Healy	04/22/2019 20:11	Betina Topolski	2078924
	04/17/2019	04/22/2019 15:30	Elliott D. Healy	04/24/2019 13:25	Betina Topolski	2078804
	04/17/2019	04/22/2019 15:30	Elliott D. Healy	04/24/2019 13:30	Betina Topolski	2078805
EPA 200.8 Rev. 5.4	04/17/2019	04/17/2019 16:40	Elliott D. Healy	04/25/2019 22:19	Martin Acosta	2078924
	04/17/2019	04/17/2019 16:40	Elliott D. Healy	05/01/2019 16:47	Martin Acosta	2078924
	04/17/2019	04/22/2019 15:30	Elliott D. Healy	04/24/2019 20:15	Robert K Palmer	2078804
	04/17/2019	04/22/2019 15:30	Elliott D. Healy	04/24/2019 20:24	Robert K Palmer	2078805
	04/17/2019	04/22/2019 15:30	Elliott D. Healy	04/29/2019 21:37	Robert K Palmer	2078804
	04/17/2019	04/22/2019 15:30	Elliott D. Healy	04/29/2019 21:44	Robert K Palmer	2078805
EPA 300.0	04/17/2019			04/18/2019 20:04	Lipi Saha	2078776
	04/17/2019			04/18/2019 20:55	Lipi Saha	2078788
EPA 300.0 Rev. 2.1	04/17/2019			04/19/2019 20:46	Lipi Saha	2078779
	04/17/2019			04/19/2019 20:58	Lipi Saha	2078782
	04/17/2019			04/24/2019 15:20	Lipi Saha	2078783
EPA 350.1 Rev. 2.0	04/17/2019			04/22/2019 13:04	Ping Hua	2078780
	04/17/2019			04/23/2019 11:15	Ping Hua	2078777
	04/17/2019			04/23/2019 11:17	Ping Hua	2078784
	04/17/2019			04/23/2019 11:18	Ping Hua	2078785
	04/17/2019			04/23/2019 11:20	Ping Hua	2078789
EPA 351.2 Rev. 2.0	04/17/2019	04/23/2019 12:00	Adrian Shelby	04/25/2019 11:45	Joseph Suarez	2078777
	04/17/2019	04/23/2019 12:00	Adrian Shelby	04/25/2019 11:46	Joseph Suarez	2078784
	04/17/2019	04/23/2019 12:00	Adrian Shelby	04/25/2019 11:48	Joseph Suarez	2078785
	04/17/2019	04/23/2019 12:00	Adrian Shelby	04/25/2019 11:50	Joseph Suarez	2078789
	04/17/2019	04/25/2019 12:20	Adrian Shelby	04/26/2019 09:42	Joseph Suarez	2078780
EPA 353.2 Rev. 2.0	04/17/2019			04/23/2019 11:01	Beverly Y. Sanders	2078780
	04/17/2019			04/24/2019 09:21	Beverly Y. Sanders	2078777
	04/17/2019			04/24/2019 09:29	Beverly Y. Sanders	2078784
	04/17/2019			04/24/2019 09:34	Beverly Y. Sanders	2078785
	04/17/2019			04/24/2019 09:36	Beverly Y. Sanders	2078789
EPA 365.1 Rev. 2.0	04/17/2019	04/22/2019 15:10	Sima Feizi	04/23/2019 11:49	Rosalyn Ballman	2078780
	04/17/2019	04/22/2019 15:10	Sima Feizi	04/23/2019 12:27	Rosalyn Ballman	2078777
	04/17/2019	04/22/2019 15:10	Sima Feizi	04/23/2019 12:30	Rosalyn Ballman	2078785
	04/17/2019	04/22/2019 15:10	Sima Feizi	04/23/2019 12:39	Rosalyn Ballman	2078789
	04/17/2019	04/22/2019 15:10	Sima Feizi	04/23/2019 14:23	Rosalyn Ballman	2078784
EPA 365.1 Rev. 2.0 dissolved	04/17/2019			04/17/2019 15:50	Jhamieka S. Greenwood	2078781
	04/17/2019			04/17/2019 16:30	Jhamieka S. Greenwood	2078786
	04/17/2019			04/17/2019 16:36	Jhamieka S. Greenwood	2078778, 2078787
	04/17/2019			04/17/2019 16:37	Jhamieka S. Greenwood	2078790

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270D	04/17/2019	04/19/2019 08:30	Rasheda Ghaffari	04/29/2019 22:12	Arthur Maknenko	2078904
	04/17/2019	04/19/2019 09:00	Fe-Val Siddell	04/23/2019 17:11	Vandana T. Nagar	2078905
EPA 8276	04/17/2019	04/19/2019 08:30	Rasheda Ghaffari	04/24/2019 02:43	Dinesh Mishra	2078904
EPA 8321B	04/17/2019	04/18/2019 12:00	Hoor Shaik	04/22/2019 06:46	Juyoung Kim	2078800
	04/17/2019	04/19/2019 10:15	Rebecca Ware	04/19/2019 14:44	Rebecca Ware	2078800
	04/17/2019	04/19/2019 10:15	Rebecca Ware	04/22/2019 14:10	Rebecca Ware	2078800
	04/17/2019	04/19/2019 10:15	Rebecca Ware	04/24/2019 18:55	Rebecca Ware	2078800
	04/17/2019	04/22/2019 14:00	Hoor Shaik	04/23/2019 23:11	Juyoung Kim	2078902
SM 2120 B	04/17/2019			04/17/2019 16:22	Mariam Hanna	2078779
	04/17/2019			04/17/2019 16:23	Mariam Hanna	2078782
	04/17/2019			04/17/2019 16:24	Mariam Hanna	2078783
SM 2320 B-97	04/17/2019			04/23/2019 23:51	Dale L. Simmons	2078779
	04/17/2019			04/26/2019 05:14	Dale L. Simmons	2078776
	04/17/2019			04/26/2019 05:26	Dale L. Simmons	2078782
	04/17/2019			04/26/2019 05:51	Dale L. Simmons	2078788
	04/17/2019			04/29/2019 19:48	Dale L. Simmons	2078783
SM 2540 C-97	04/17/2019			04/22/2019 15:58	Yijie Li	2078779, 2078782, 2078783
SM 2540 D-97	04/17/2019			04/22/2019 15:58	Yijie Li	2078776, 2078779, 2078782, 2078783, 2078788
SM 4500 F-C-97	04/17/2019			04/23/2019 23:03	Dale L. Simmons	2078779
	04/17/2019			04/26/2019 05:14	Dale L. Simmons	2078776
	04/17/2019			04/26/2019 05:26	Dale L. Simmons	2078782
	04/17/2019			04/26/2019 05:39	Dale L. Simmons	2078783
	04/17/2019			04/26/2019 05:51	Dale L. Simmons	2078788
SM 5310 B-00	04/17/2019			04/19/2019 01:52	Julia Storbeck	2078777
	04/17/2019			04/19/2019 02:05	Julia Storbeck	2078784
	04/17/2019			04/19/2019 02:17	Julia Storbeck	2078785
	04/17/2019			04/19/2019 02:54	Julia Storbeck	2078789
	04/17/2019			04/19/2019 05:59	Julia Storbeck	2078780